



Business-friendly Solutions



Case Study

Payment Aggregator Platform Development for an Australian Fintech

Product development for an Australian payment aggregator, enabling merchants to accept various payment methods without setting up individual accounts



CHALLENGE

Client wanted to build a payment aggregator platform to support multiple methods such as BNPS, credit/debit card, internet banking, eWallets etc. Traditionally, retailers have had to invest significant time and resources to integrate their ecommerce applications into different regions and payment providers. This process often necessitated the involvement of technical personnel to develop and integrate the required payment methods.



ENGAGEMENT

To develop a universal payment solution to integrate multiple payment gateways and multiple payment methods. Key Considerations of a Payment Aggregator include:

- ❖ **Payment Processing:** Transfers payment information from customers to merchants and banks, supporting various methods like credit/debit cards, digital wallets, and bank transfers
- ❖ **Security:** Uses encryption and tokenization to protect data, complying with PCI-DSS standards
- ❖ **Fraud Detection and Prevention:** Utilizes algorithms and real-time monitoring to detect fraud, offering tools for merchants to set up filters and alerts
- ❖ **Settlement and Reconciliation:** Manages fund transfers from customers to merchants, providing detailed reporting for transaction tracking
- ❖ **Integration:** Provides APIs and SDKs for seamless integration with e-commerce platforms, mobile apps, and checkout processes



SOLUTION

Our team provided design, development, and testing services to implement the platform. This platform onboarded various payment partners and integrated with multiple payment methods.

We delivered the services using the following methodology:

- ❖ The team used a phased approach to understand, discover, and analyze the domain model and apply DDD patterns to derive the target state architecture
- ❖ API-led design helps to manage, monitor and analyze the platform
- ❖ Innovative delivery approach. i.e., identify unique business use cases and develop pattern-based archetype for real-time and batch process
- ❖ Design and build technical services to handle common processes, exception or error handling, auditing and logging, and handle security and encryption
- ❖ Agile delivery to accelerate and maximize time to value and cost efficiency



KEY DIFFERENTIATORS

The client needed a partner for accelerated feature development and time to market. Further they were looking for a cloud native development partner that worked in the past with startup product companies. We were shortlisted on account of the above.

- ❖ We created a centralized platform that brought together a wide range of payment methods, including bank transfers, Buy Now Pay Later (BNPL) options, cryptocurrencies, and digital wallets. By consolidating these payment methods under one roof, we sought to provide retailers with a one-stop solution for their payment needs. As a payment aggregator, the client took care of the backend integration of these payment providers for the retailers
- ❖ Used React.js for front-end development
- ❖ Google API Gateway implemented for Api implementation
- ❖ Used Node.js to develop a backend service and followed microservices best practices
- ❖ PostgreSQL and MySQL are used for database services
- ❖ SL/TLS, AES implemented for security, and PCI-DSS guidelines implemented for compliance
- ❖ Prometheus and Grafana are implemented for a monitoring and observability solution
- ❖ Docker and Kubernetes are utilized to achieve orchestration.

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